

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Declaration and Power of Attorney

As the below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled **METHOD AND APPARATUS FOR INTERLEAVER SYNCHRONIZATION IN AN ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING (OFDM) COMMUNICATION SYSTEM**, the specification of which was filed in the United States Patent and Trademark Office on September 17, 1999 and assigned Serial No. 09/398,501.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by an amendment, if any, specifically referred to in this oath or declaration.

I acknowledge the duty to disclose all information known to me which is material to patentability as defined in Title 37, Code of Federal Regulations, 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

None

I hereby claim the benefit under Title 35, United States Code, 119(e) of any United States provisional application(s) listed below:

None

I hereby claim the benefit under Title 35, United States Code, 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

None

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the

United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

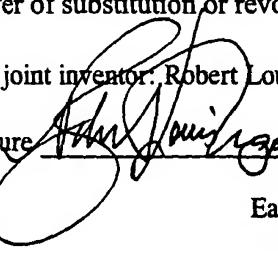
I hereby appoint the following attorney(s) with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith:

Lester H. Birnbaum	(Reg. No. 25830)
Richard J. Botos	(Reg. No. 32016)
Jeffery J. Brosemer	(Reg. No. 36096)
Kenneth M. Brown	(Reg. No. 37590)
Craig J. Cox	(Reg. No. 39643)
Donald P. Dinella	(Reg. No. 39961)
Guy Eriksen	(Reg. No. 41736)
Martin I. Finston	(Reg. No. 31613)
James H. Fox	(Reg. No. 29379)
William S. Francos	(Reg. No. 38456)
Barry H. Freedman	(Reg. No. 26166)
Julio A. Garceran	(Reg. No. 37138)
Mony R. Ghose	(Reg. No. 38159)
Jimmy Goo	(Reg. No. 36528)
Anthony Grillo	(Reg. No. 36535)
Stephen M. Gurey	(Reg. No. 27336)
John M. Harman	(Reg. No. 38173)
Michael B. Johannessen	(Reg. No. 35557)
Mark A. Kurisko	(Reg. No. 38944)
Irena Lager	(Reg. No. 39260)
Christopher N. Malvone	(Reg. No. 34866)
Scott W. McLellan	(Reg. No. 30776)
Martin G. Meder	(Reg. No. 34674)
John C. Moran	(Reg. No. 30782)
Michael A. Morra	(Reg. No. 28975)
Gregory J. Murgia	(Reg. No. 41209)
Claude R. Narcisse	(Reg. No. 38979)
Joseph J. Opalach	(Reg. No. 36229)
Neil R. Ormos	(Reg. No. 35309)
Eugen E. Pacher	(Reg. No. 29964)
Jack R. Penrod	(Reg. No. 31864)
Daniel J. Piotrowski	(Reg. No. 42079)
Gregory C. Ranieri	(Reg. No. 29695)
Scott J. Rittman	(Reg. No. 39010)
Eugene J. Rosenthal	(Reg. No. 36658)
Bruce S. Schneider	(Reg. No. 27949)
Ronald D. Slusky	(Reg. No. 26585)
David L. Smith	(Reg. No. 30592)
Patricia A. Verlangieri	(Reg. No. 42201)
John P. Veschi	(Reg. No. 39058)
David Volejnicek	(Reg. No. 29355)

Charles L. Warren (Reg. No. 27407)
 Jeffrey M. Weinick (Reg. No. 36304)
 Eli Weiss (Reg. No. 17765)

I hereby appoint the attorneys on ATTACHMENT A as associate attorneys in the aforementioned application, with full power solely to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected with the prosecution of said application. No other powers are granted to such associate attorneys and such associate attorneys are specifically denied any power of substitution or revocation.

Full name of 1st joint inventor: Robert Louis Cupo

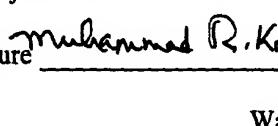
Inventor's signature  Date 10/18/99

Residence: Eatontown, Monmouth County, New Jersey

Citizenship: U.S.A.

Post Office Address: 32 Jeryl Street
Eatontown, NJ 07724

Full name of 2nd joint inventor: Muhammad R. Karim

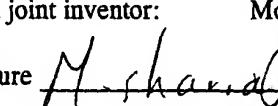
Inventor's signature  Date 10/18/99

Residence: Wayside, Monmouth County, New Jersey

Citizenship: U.S.A.

Post Office Address: 4 Naomi Road
Wayside, NJ 07712

Full name of 3rd joint inventor: Mojtaba Shariat

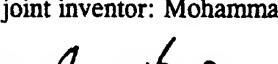
Inventor's signature  Date 10/19/99

Residence: Colts Neck, Monmouth County, New Jersey

Citizenship: U.S.A.

Post Office Address: 36 Hartshorn
Colts Neck, NJ 07712

Full name of 4th joint inventor: Mohammad Hossein Zarrabizadeh

Inventor's signature  Date 10/18/99

Residence: Woodbridge, Middlesex County, New Jersey

Citizenship: Iran

Post Office Address: 71F Woodbridge Terrace
Woodbridge, NJ 07095

ATTACHMENT A

Attorney Names:	<u>Joseph B. Ryan</u>	Reg. Nos.:	<u>37,922</u>
	<u>Kevin M. Mason</u>		<u>36,597</u>
	<u>William E. Lewis</u>		<u>39,274</u>

Telephone calls should be made to Kevin M. Mason at:

Phone No.: (203) 255-6560

Fax No.: (203) 255-6570

All written communications are to be addressed to:

Ryan & Mason, L.L.P.
90 Forest Avenue
Locust Valley, NY 11560

ASSIGNMENT AND AGREEMENT

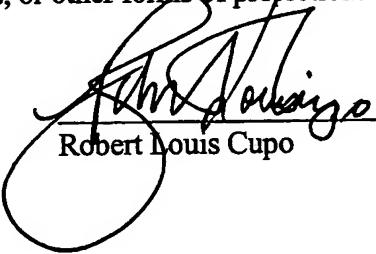
For value received, we, Robert Louis Cupo, of Eatontown in the County of Monmouth and State of New Jersey, Muhammad R. Karim, of Wayside in the County of Monmouth and State of New Jersey, Mojtaba Shariat of Colts Neck in the County of Monmouth and State of New Jersey, and Mohammad Hossein Zarrabizadeh, of Woodbridge in the County of Middlesex and State of New Jersey, hereby sell, assign and transfer to Lucent Technologies Inc., a corporation of the State of Delaware, having an office at 600 Mountain Avenue, Murray Hill, New Jersey 07974-0636, U.S.A., and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to a **METHOD AND APPARATUS FOR INTERLEAVER SYNCHRONIZATION IN AN ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING (OFDM) COMMUNICATION SYSTEM**, described in an application for Letters Patent of the United States, filed on September 17, 1999 and assigned Serial No. 09/398,501, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and we also concurrently hereby sell, assign and transfer to Lucent Technologies Inc. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

We authorize Lucent Technologies Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Lucent Technologies Inc. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Lucent Technologies Inc. in the United States and in all countries foreign to the United States, or to such nominees as Lucent Technologies Inc. they may designate.

We agree that, when requested, we shall, without charge to Lucent Technologies Inc. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.



Robert Louis Cupo

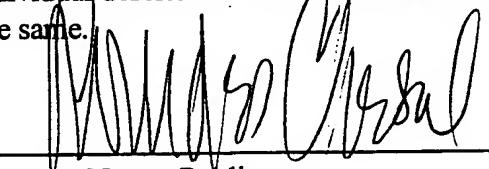
Date: 10/18/99

United States of America)

State of New Jersey) ss.:

County of Monmouth)

On this 18th day of October, 1999, before me personally came Robert Louis Cupo, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.



Notary Public

LOURDES CHESAL
Notary Public State of New Jersey
My Commission Expires 4/24/2001

Muhammad R. Karim

Muhammad R. Karim

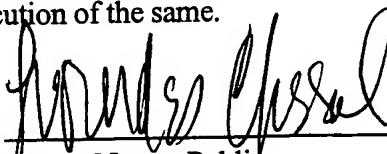
Date: 10/18/99

United States of America)

State of New Jersey) ss.:

County of Monmouth)

On this 18th day of October, 1999, before me personally came Muhammad R. Karim, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.



Notary Public

**LOURDES CHESAL
Notary Public State of New Jersey
My Commission Expires 4/24/2001**

M-Sharia
Mojtaba Shariat

Date: 10/19/99

United States of America)

State of New Jersey) ss.:

County of Monmouth)

On this 19th day of October, 19 99, before me personally came Mojtaba Shariat, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Lourdes Chesal

Notary Public

LOURDES CHESAL
Notary Public State of New Jersey
My Commission Expires 4/24/2001

Zarrabizadeh
Mohammad Hossein Zarabizadeh

Date: 10/18/99

United States of America)

State of New Jersey) ss.:

County of Monmouth)

On this 18th day of October, 1999, before me personally came Mohammad Hossein Zarabizadeh, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Lourdes Chesal
Notary Public

**LOURDES CHESAL
Notary Public State of New Jersey
My Commission Expires 4/24/2001**

Ryan & Mason, L.L.P.
90 Forest Avenue
Locust Valley, NY 11560